

## STEGNOSPERMA: A NEW SPECIES AND A GENERIC COMMENTARY

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The genus *Stegnosperma* (Phytolaccaceae) has been considered monotypic since Walter's treatment for Engler's 'Pflanzenreich'<sup>1</sup>. However, an examination of specimens in the major North American herbaria shows the inclusive species *S. balimifolium* Benth. of Walter to be rather heterogeneous. Actually, three species exist, two of which have been described and published, the third noted by S. Watson on an herbarium label but never published. A description of the third species is provided here and is named for Dr. Watson.

**STEGNOSPERMA *Watsonii*** D. J. Rogers, n. sp. Frutices aut scandentes aut crassi patulique 1–5 m. alti, 1–5 m. diam., cortice griseo vel rufo-brunneo. Folia anguste spathulata vel elliptica emarginata vel rotunda vel acuta 1.0–3.5 cm. longa 0.5–2.5 cm. lata, petiolo 0.1–0.3 cm. longo. Inflorescentia cymulis axillaribus aut terminalibus 1–8-floris; calycis lobis ellipticis vel ovatis 0.3–0.7 cm. longis 0.2–0.4 cm. latis; petalis ovatis rotundatis basi abrupte constrictis; fructu capsula 5-loculata plerumque in 5 valvis dehiscente; seminibus plerumque 5 aliquando 4 ovoideis vel ellipsoideis circa 0.3 cm. longis 0.2–0.3 cm. latis, cicatrice funiculari laterali, raphe in jugum dorsalem, testa levi fulgenti rufo-brunneo.

Sprawling vine or coarse spreading shrub, 1–5 m. tall, 1–5 m. diameter spread; bark gray to reddish brown. Leaves narrowly spathulate to elliptic, emarginate to rounded to acute, 1.0–3.5 cm. long, 0.5–2.5 cm. wide, petiole 0.1–0.3 cm. long. Inflorescence of axillary or terminal 1- to 8-flowered cymules; calyx lobes elliptic to ovate, 0.3–0.7 cm. long, 0.2–0.4 cm. wide; petals ovate, rounded, abruptly constricted at base; fruit a 5-celled capsule, usually dehiscent by 5 valves; seeds usually 5, occasionally 4, ovoid to ellipsoid, about 0.3 cm. long, 0.2–0.3 cm. wide, funicular scar lateral, raphe on a dorsal ridge, testa smooth, shiny, reddish brown.

MEXICO: BAJA CALIFORNIA: *Wiggins 7681*. SINALOA: *Jones s. n.* SONORA: *Abrams 13343; Coville 1646; Dawson 1058; Drouet, Richards & Alvarado 3443; Ferris 8741; Gentry 2195, 2975; Goldman 399; Keck 4067; LeRoy s. n.; Lumboltz 9; McGee s. n.; William Palmer 1226* (HOLOTYPE in Herb. Missouri Botanical Garden, isotypes in Herb. N. Y. Bot. Gard. and U. S. Nat. Herb.); *Pringle s. n.; Rose 1211, 1211a; Rose, Standley & Russell 12390, 12566, 13138, 13231, 15047; Shreve 5992; Wiggins 6247*.

This species seems to be most closely related to *S. balimifolium* Benth., from which it may be distinguished by its scattered, few-flowered cymules, its ovate, abruptly constricted petals, and by its lateral funicular scar.

*Stegnosperma Watsonii* grows on hillsides along rivers, thickets in palm groves, thorny foothills, from sea level to 300 meters. It flowers from about the first of February through March, and fruits from the last of February through April.

That there are actually three species of *Stegnosperma* is most easily demonstrated by the following key:

<sup>1</sup>Walter in Engl. Pflanzenr. IV, 83:124. 1909.

- A. Inflorescence a terminal, many-flowered racemiform thyrses; petals rather gradually narrowed to the base.  
 B. Sepals linear to elliptic; petals linear to spatulate; capsule dehiscing by 3 to 4 or rarely 5 valves, usually with 1 to 3 seeds; seeds with a lateral to sub-basal funicular scar, the raphe on a flattened dorsal surface.....*S. cubense*  
 BB. Sepals ovate; petals ovate to elliptic; capsule dehiscing by 5 valves, usually with 5 seeds; seeds with a basal funicular scar, the raphe on a dorsal ridge.....*S. balimifolium*  
 AA. Inflorescence an axillary, 1- to 8-flowered cymule; petals abruptly constricted at the base .....*S. Watsonii*

*STEGNOSPERMA CUBENSE* A. Rich. in Sagra, Hist. Nat. Cuba 10:309; 12:tab. 44<sup>3</sup>. 1845.

[*Trichilia*] *scandens*, foliis simplicibus, ovatis alternis, etc. A. Robinson ex Lunan, Fl. Jam. 2:319. 1814.

*Trichilia scandens* Lunan ex B. D. Jackson, in Index Kewensis 2:1105. 1895. Based on the preceding.

*Stegnosperra scandens* (Lunan ex B. D. Jackson) Standley, in Field Mus. Publ. Bot. 23:6. 1943.

*Stegnosperra balimifolium* of authors, not Benth.

MEXICO: TRES MARIAS ISLANDS: *Fisher s. n.*; *Howell 10409*; *Maltby 45*; *Mason 1702*; *Nelson 4185*; *Solis 4, 22, 45*. REVILLA GIGEDOS ISLANDS: *Mason 1846*. SINALOA: *T. S. Brandegee s. n.*; *Eyerdam & Beetle 8652*; *Lamb 465*; *Mexia 45, 152, 1095*; *Ortega 4480, 5150, 5649, 6453, 7232, 7488*; *E. Palmer 1503*; *Rose s. n., 1535*; *Rose, Standley & Russell 13721*. NAYARIT: *Ferris 5309*; *Nelson 4349*. COLIMA: *Goldsmith 99*; *Jones 13*; *E. Palmer 1280*. MICHOACAN: *Hinton 12627*; *Leavenworth & Hoogstraal 1394*. MEXICO: *Hinton 3764*. GUERRERO: *Hinton 5431, 5719, 5962*. OAXACA: *Matuda 0664*; *Nelson 2597*; *Orcutt 3307*. CHIAPAS: *Matuda 2808*; *Morley 710*. VERA CRUZ: *Purpus 8959, 10989, 13066*.

GUATEMALA: ESCUINTLA: *Salas 378*. SAN JOSE: *Worth, Morrison & Horton 8632*. RETALHULEU: *Standley 87707*. SAN MARCOS: *Steyermark 37762, 37773, 37881*. SUCHITEPEQUEZ: *Steyermark 47825*. ZACAPA: *Standley 74066*; *Steyermark 42084*.

EL SALVADOR: LA LIBERTAD: *Standley 23219*.

NICARAGUA: CHINANDEGA: *Baker 2065*. MANAGUA: *Chaves 262*; *Garnier 1071*; *Maxon, Harvey & Valentine 7215*.

CUBA: HABANA: *Ekman 13493*. PINAR DEL RIO: *Baker & Van Hermann 4247*; *Ekman 13039, 16733*; *Leon & Roca 7132, 8810*; *Shafer 11140, 11148*; *Wilson 11400, 11404*. WITHOUT LOCALITY: *Wright 2027*.

JAMAICA: vicinity of Spanish Town, *Britton 3062*. Healthshire Hills, *Harris & Britton 10522*.

DOMINICAN REPUBLIC: Beata Island, *Fairchild 2605, 2606, s. n.*; *Ostenfeld 319*. Massif des Cahos, *Ekman H9095*. BARAHONA: *Ekman H6961*. SIERRA DE OCOA: *Ekman H13360*. WITHOUT LOCALITY: *Bertero s. n.*

PUERTO RICO: Asomante, *Horne & Britton 9628*.

This species, although placed in synonymy under *S. balimifolium* by Walter<sup>2</sup>, is sufficiently distinct to be maintained. The description and plate provided by Richard demonstrate its characters accurately. Further characters which support my interpretation are found in the seed. These characters are used in the key.

An interesting nomenclatorial problem concerning this species arose when Standley<sup>3</sup> made an apparently valid transfer of a "species" of *Trichilia* ascribed to Lunan by B. D. Jackson in 'Index Kewensis'<sup>4</sup>. Lunan's "publication" of A. Robin-

<sup>2</sup>Walter, loc. cit.

<sup>3</sup>Standley, in Field Mus. Publ. Bot. 23:6. 1943.

<sup>4</sup>B. D. Jackson in Index Kewensis 2:1105. 1895.

son's manuscript description of a new species of *Trichilia* was as a polynomial. Jackson's interpretation of the name as a binomial possibly could be explained by a method used in early printing in which the first word of a page was placed at the bottom of the preceding page on a line by itself. In this case, the first word to appear in the first sentence at the top of page 320, Lunan's *Fl. Jam.* Vol. 2, and accordingly at the bottom of the preceding page was "*scandens*." I do not think that Lunan intended a binomial since he did not mention "*scandens*" as a species in his Classical Index of this work although other properly published binomials are listed, nor did he use the same form in his discussion of the plant in question as he consistently used throughout the text for species designation.

STEGNOSPERMA HALIMIFOLIUM Benth. *Bot. Voy. Sulph.* 17:pl. 12. 1844 (as *halimifolia*).

MEXICO: BAJA CALIFORNIA: *T. S. Brandegee s. n.*; *Carter 2725*; *Carter, Alexander & Kellogg 1980, 2115, 2497*; *Collins, Kearney & Kempton 186*; *Epling & Robison s. n.*; *Ferris 8617*; *Gentry 4032, 7603, 7864*; *Hammerly 102*; *Harvey 609*; *Johnston 3166, 3354, 3488, 3512, 3593, 3825*; *Jones 24481, 27465*; *Nelson & Goldman 7147, 7249, 7323, 7395, 7502*; *E. Palmer 31, 258, 400, 870*; *Purpus s. n., 5*; *Rose 16289, 16415, 16616, 16690; 16924; 16947*; *Shreve 6973*; *Wiggins 5415, 5651, 6070, 7793*; *Xantus 9b.* SONORA: *MacDougal & Shreve 40, 47*; *Pringle s. n.*

The generic ending of Bentham's specific epithet has been altered to comply with the International Rules of Botanical Nomenclature, Section 14, Art. 72 (2).

As I have interpreted this species, it occupies a rather narrow range in Baja California and occasionally in the adjoining state of Sonora, Mexico.

I have been able to examine specimens from several of the major herbaria of the United States, but have not seen the type specimens nor any other material from Europe.

The herbaria where specimens have been obtained for study are as follows: Gray Herbarium of Harvard University, Chicago Natural History Museum, Missouri Botanical Garden, New York Botanical Garden, University of California at Berkeley, and the United States National Herbarium.

I wish to acknowledge my indebtedness to the curators of these institutions.